In the claims:

1. (Withdrawn) A composite liner panel for use in a thermal insulated wall structure, comprising:

    a. at least one gas impermeable barrier layer;

    b. at least one structural polymer resin layer disposed coplanar and attached to said barrier layer, thereby forming a laminate liner panel; and

    c. an insulated core layer disposed coplanar to said at least one gas impermeable barrier layer.

2. (Withdrawn) The composite liner panel of claim 1, wherein said structural polymer resin layer is fiber reinforced.

3. (Withdrawn) The composite liner panel of claim 1, wherein said structural polymer resin layer is strengthened by orienting the polymer molecules.

4. (Withdrawn) The composite liner panel of claim 1, wherein said polymer resin is a thermoplastic polymer.

5. (Withdrawn) The composite liner panel of claim 4, wherein said thermoplastic polymer is polypropylene.

6. (Withdrawn) The composite liner panel of claim 5, wherein said at least one gas impermeable barrier layer is a metallized polyester film.

7. (Withdrawn) The composite liner panel of claim 1, further comprising a first adhesive layer intermediate said barrier layer and said at least one structural polymer resin layer and attaching said barrier layer and said at least one structural polymer resin layer.

8. (Withdrawn) The composite liner panel of claim 1, wherein said at least one gas impermeable barrier layer is a metallized polypropylene film.

9. (Withdrawn) The composite liner panel of claim 1, wherein said at least one gas impermeable barrier layer is a metal foil.

10. (Withdrawn) The composite liner panel of claim 9, further comprising an adhesive layer coplanar with and intermediate said at least one foil layer and said at least one structural polymer resin layer and attaching said at least one foil layer and said at least one structural polymer resin layer.

11. (Withdrawn) The composite liner panel of claim 1, further comprising a scrim layer intermediate said at least one barrier layer and said insulated core layer.

12. (Withdrawn) The composite liner panel of claim 1, further comprising a surface film layer.

13. (Withdrawn) The composite liner panel of claim 12, wherein said surface film layer is a polymer.

14. (Withdrawn) The thermal insulated composite wall panel of claim 13, wherein said surface film layer polymer is polypropylene.

15. (Withdrawn) The composite liner panel of claim 11, wherein said scrim layer is formed from fibers.

16. (Withdrawn) The composite liner panel of claim 15, wherein said fibers are glass.

17. (Withdrawn) The composite liner panel of claim 11, wherein said fibers are polyester.

18. (Withdrawn) The composite liner panel of claim 7, further comprising a second structural polymer resin layer coplanar with said at least one gas impermeable barrier layer located on the opposite side of said first structural polymer resin layer.

19. (Withdrawn) The composite liner panel of claim 18, wherein said second polymer resin is polypropylene.

20. (Withdrawn) The composite liner panel of claim 18, further comprising a second adhesive layer coplanar with and intermediate said at least one gas impermeable barrier layer and said second structural polymer resin layer and attaching said barrier layer and said second structural polymer resin layer.

21. (Withdrawn) The composite liner panel of claim 1, wherein said polymer resin is a thermoset material.

22. (Withdrawn) The composite liner panel of claim 21, wherein said barrier layer is sprayed onto said thermoset material.

23. (Withdrawn) The composite liner panel of claim 21, wherein said barrier layer is sputtered onto said thermoset material.

24. (Withdrawn) The composite liner panel of claim 21, wherein said barrier layer is adhesively bonded to said thermoset material.

25. (Withdrawn) The composite liner panel of claim 1, wherein said insulated core layer is gas impregnated rigid foam.

26. (Withdrawn) The composite liner panel of claim 7, wherein said adhesive layer further comprises a film.

27. (Withdrawn) The composite liner panel of claim 20, wherein said second adhesive layer further comprises a film.

28. (Withdrawn) A composite liner panel for use in a thermal insulated wall structure, comprising:

a. an insulating core layer;

b. at least one gas impermeable barrier layer that is coplanar with and attached to said insulating core layer; and

c. at least one structural polymer resin layer disposed coplanar to and consolidated with said barrier layer, thereby forming a laminate liner panel.

29. (Withdrawn) The cargo compartment of claim 28, wherein said at least one structural polymer resin layer is fiber reinforced.

30. (Withdrawn) The composite liner panel of claim 28, wherein said structural polymer resin is polypropylene.

31. (Withdrawn) The composite liner panel of claim 30, wherein said at least one gas impermeable barrier layer is a metallized polyester film.

32. (Withdrawn) The composite liner panel of claim 28, further comprising a first adhesive layer coplanar with and intermediate said at least one barrier layer and said at least one structural polymer resin layer attaching said barrier layer to said at least one structural polymer resin layer.

33. (Withdrawn) The composite liner panel of claim 28, wherein said at least one gas impermeable barrier layer is a metallized polypropylene film.

34. (Withdrawn) The composite liner panel of claim 28, wherein said at least one gas impermeable barrier layer is a metal foil.

35. (Withdrawn) The composite liner panel of claim 33, further comprising an adhesive layer coplanar with and intermediate said at least one foil layer and said at least one

structural polymer resin layer attaching said at least one foil layer to said at least one structural polymer resin layer.

36. (Withdrawn) The composite liner panel of claim 28, further comprising a polymer scrim layer intermediate said insulating core and said at least one barrier layer.

37. (Withdrawn) The composite liner panel of claim 28, further comprising a surface film layer disposed coplanar to and boded with said at least one structural polymer layer.

38. (Withdrawn) The composite liner panel of claim 37, wherein said surface film layer comprises polypropylene.

39. (Withdrawn) The composite liner panel of claim 32, further comprising a second structural polymer resin layer coplanar with said at least one gas impermeable barrier layer and located on the opposite side of said first structural polymer resin layer.

40. (Withdrawn) The composite liner panel of claim 39, wherein said second structural polymer is polypropylene.

41. (Withdrawn) The composite liner panel of claim 39, further comprising a second adhesive layer coplanar with and intermediate said at least one barrier layer and said second structural polymer resin layer attaching said barrier layer to said at least one structural polymer resin layer.

42. (Withdrawn) The composite liner panel of claim 36, said scrim layer further comprising fibers.

43. (Withdrawn) The composite liner panel of claim 42, wherein said fibers are polyester.

44. (Original) A method for forming a composite liner panel for use in a thermal insulated wall structure, comprising:

a. providing

at least one gas impermeable barrier layer,

at least one structural polymer resin layer disposed coplanar to said barrier layer, and

a thermal insulated core layer

b. bonding said at least one gas impermeable barrier layer to said at least one structural polymer layer, thereby forming a laminate liner panel;

c. attaching said laminate liner panel to said thermal insulated core layer.

45. (Original) The method for forming a composite liner panel of claim 44, step (b) further comprising heating said at least one gas impermeable barrier layer and said at least one structural polymer resin layer and compressing together said at least one gas impermeable barrier layer and said at least one structural polymer resin layer.

46. (Original) The method for forming a composite liner panel of claim 45, further comprising cooling said laminate after step (b).

47. (Original) The method for forming a composite liner panel of claim 44, wherein said structural polymer is a thermoset material.

48. (Original) The method for forming a composite liner panel of claim 47, step (b) further comprising providing an adhesive intermediate said barrier layer and said at least one structural polymer resin layer attaching said barrier layer to said at least one structural polymer resin layer.

49. (Original) The method for forming a composite liner panel of claim 47, step (b) further comprising spraying said barrier layer onto said at least one structural polymer resin layer.

50. (Original) The method for forming a composite liner panel of claim 45, wherein said at least one gas impermeable barrier layer is a metallized polyester film.

51. (Original) The method for forming a composite liner panel of claim 50, further comprising providing a first adhesive layer intermediate said at least one metallized polyester film and said at least one structural polymer resin layer attaching said at least one metallized polyester film to said at least one structural polymer resin layer.

52. (Original) The method for forming a composite liner panel of claim 51, wherein said at least one gas impermeable barrier layer is a metallized polypropylene film.

53. (Original) The method for forming a composite liner panel of claim 44, wherein said at least one gas impermeable barrier layer is a metal foil.

54. (Original) The method for forming a composite liner panel of claim 51, further comprising providing a second structural polymer resin layer coplanar to said at least one gas impermeable barrier layer and on the opposite side of said at least one structural polymer resin layer.

55. (Original) The method for forming a composite liner panel of claim 54, further comprising providing a second adhesive layer intermediate said at least one metallized polyester film and said second structural polymer resin layer.

56. (Original) The method for forming a composite liner panel of claim 44, wherein said structural polymer resin layer is fiber reinforced.

57. (Original) The method for forming a composite liner panel of claim 56, wherein said fibers are glass.

58. (Original) The method for forming a composite liner panel of claim 55, further comprising providing a scrim layer coplanar with and intermediate said second structural polymer resin layer and said insulated core layer.

59. (Original) The method for forming a composite liner panel of claim 44, wherein said insulated core layer comprises gas impregnated foam core.

60. (Original) The method for forming a composite liner panel of claim 59, wherein said insulated core layer further comprises polyurethane.

61. (Previously Presented) A method for forming a composite liner panel for use in a thermal insulated wall structure, comprising:

a. providing

at least one gas impermeable barrier layer,

at least one structural polymer resin layer disposed coplanar to said barrier layer, and

b. bonding said at least one gas impermeable barrier layer to said at least one structural polymer layer by heating said at least one gas impermeable barrier layer and said at least one structural polymer resin layer and compressing together said at least one gas impermeable barrier layer and said at least one structural polymer resin layer thereby forming a laminate liner panel.

62. (Previously Presented) The method for forming a composite liner panel of claim 61, further comprising cooling said laminate after step (b).

63. (Previously Presented) The method for forming a composite liner panel of claim 62, step (b) further comprising providing an adhesive intermediate said barrier layer and

said at least one structural polymer resin layer for attaching said barrier layer to said at least one structural polymer resin layer.

64. (Previously Presented) The method for forming a composite liner panel of claim 62, step (b) further comprising spraying said barrier layer onto said at least one structural polymer resin layer.

65. (Previously Presented) The method for forming a composite liner panel of claim 61, wherein said at least one gas impermeable barrier layer is a metallized polyester film.

66. (Previously Presented) The method for forming a composite liner panel of claim 65, further comprising providing a first adhesive layer intermediate said at least one metallized polyester film and said at least one structural polymer resin layer for attaching said at least one metallized polyester film to said at least one structural polymer resin layer.

67. (Previously Presented) The method for forming a composite liner panel of claim 66, wherein said at least one gas impermeable barrier layer is a metallized polypropylene film.

68. (Previously Presented) The method for forming a composite liner panel of claim 65, wherein said at least one gas impermeable barrier layer is a metal foil.

69. (Previously Presented) The method for forming a composite liner panel of claim 66, further comprising providing a second structural polymer resin layer coplanar to said at least one gas impermeable barrier layer and on the opposite side of said at least one structural polymer resin layer.

70. (Previously Presented) The method for forming a composite liner panel of claim 69, further comprising providing a second adhesive layer intermediate said at least one metallized polyester film and said second structural polymer resin layer.

71. (Previously Presented) The method for forming a composite liner panel of claim 61, wherein said structural polymer resin layer is fiber reinforced.

72. (Previously Presented) The method for forming a composite liner panel of claim 71, wherein said fibers are glass.

73. (Previously Presented) The method for forming a composite liner panel of claim 70, further comprising providing a scrim layer coplanar with and intermediate said second structural polymer resin layer.